

## **REMARKS**

This is a full and timely response to the non-final Office Action mailed February 6, 2007. Upon entry of the foregoing amendments, claims 1, 3-18 and 22-24 are pending in the application. Claims 1, 5, 22 and 24 have been amended. Claims 2 and 19-21 have been canceled. The subject matter of amended claims 1, 5, 22, and 24 can be found in the originally filed detailed description section of the application. Consequently, no new matter is added to the present application. In light of the foregoing amendments and following remarks, Applicants request reconsideration of the application and pending claims.

### **I. Claim Objections**

Claim 1 is objected to because of an alleged informality. Specifically, the Office Action alleges that there is ambiguity in the limitation, “a navigation engine, coupled to the navigation array, the navigation engine configured for controlling when the navigation array captures navigation images and further configured for receiving the navigation images.” The Examiner assumed that the Applicants intended, “a navigation engine, coupled to the navigation array, the navigation engine configured for controlling when the imaging array captures sub-images.” The statement of the objection adds that appropriate correction is required.

Claim 1 has been amended as suggested by the Examiner. Accordingly, Applicants request that the objection to claim 1 be withdrawn.

### **II. Claim Rejections Under 35 USC § 103 – Claims 1, 3-7, 9-15, 17, 18 and 22-24**

#### **A. Statement of the Rejections**

Claims 1, 3-7, 9-15, 17, 18 and 22-24 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over of U.S. Patent No. 6,333,989 to Borza, hereafter *Borza* in view of U.S. Patent No. 6,207,945 to Bohn *et al.*, hereafter *Bohn*.

**B. Discussion of the Rejections**

In order for a claim to be properly rejected under 35 U.S.C. § 103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, e.g., *In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (Citations omitted). Thus, to establish a *prima facie* case of obviousness, the prior art (or references when combined) must teach or suggest all claim features.

Applicants' independent claims 1 and 22, as amended, comprise a combination (of elements and features) that is not disclosed, taught, or suggested by the prior art.

**Claims 1, 3-7, 9-15, 17 and 18**

Applicants' independent claim 1, as amended, includes

“a navigation engine, coupled to the navigation array, the navigation engine configured for controlling when the imaging array captures sub-images, and further configured for receiving the navigation images and based thereon for determining a delta x, which is then compared to a predetermined x unit value for determining the amount of movement of a fingerprint generally along the x-axis and for determining a delta y, which is then compared to a predetermined y unit value for determining the amount of movement of a fingerprint along a y-axis that is generally perpendicular to the x-axis, wherein the navigation engine directs the rate at which the imaging array captures sub-images of the fingerprint in response to the rate of movement of the fingerprint.”

The proposed combination (namely, *Borza* in view of *Bohn* as applied to claim 1) fails to disclose, teach or suggest at least this feature of claim 1.

The Office Action (page 3) alleges that *Borza* discloses “a navigation engine (i.e., 16) coupled to the navigation array (i.e., 101), the navigation engine configured for controlling when the navigation array captures images and further configured for receiving navigation images based thereon . . .” Applicants respectfully disagree with this interpretation of *Borza*.

Figure 3a of *Borza* illustrates timing and sequence logic 16, which as described in column 5, lines 43-47 “selects each element in the array (array of sensing elements 17), in turn, to produce a complete image of a fingerprint presented to the device. The signal is output directly as an analog signal or, alternatively, is converted to a digital signal prior to output from the device.” Thus, the timing and sequence logic of *Borza* selects and/or directs each element, in turn, in the array of sensing elements to generate an output signal responsive to a fingerprint. The timing and sequence logic 16 is not configured to receive navigation images. Figure 3a does not illustrate, and the detailed description of *Borza* is entirely silent regarding, a navigation engine that receives navigation images from a navigation array. *Borza* describes a sensing pad 100 separated by a known distance from a second sensing pad 101. When the same image is detected by sensing pad 100 and sensing pad 101, the fingertip is known to have moved the separation distance.

Furthermore, *Borza* is entirely silent regarding a navigation engine that directs the rate at which an imaging array captures sub-images of the fingerprint in response to the rate of movement of the fingerprint.

*Bohn* discloses a portable imaging device or scanner wherein the imaging portion of the imaging device is integrated with an optical positioning system. The imaging device has a linear array of photodetector elements that generate machine readable image data representing an object being imaged. At least one two-dimensional photodetector segment is integrated with the linear array of photodetector elements. The two-dimensional photodetector segment serves the dual function of providing image data and positioning data. *Bohn*, like *Borza* is entirely silent regarding a navigation engine that directs the rate at which an imaging array captures sub-images of the fingerprint in response to the rate of movement of the fingerprint.

In contrast, Applicants’ claimed navigation engine receives the navigation images and based thereon determines a delta x, which is then compared to a predetermined x unit value for determining the amount of movement of a fingerprint generally along the x-axis and for determining a delta y, which is then compared to a predetermined y unit value for determining the amount of movement of a fingerprint along a y-axis that is generally perpendicular to the x-axis. Moreover, in further

contrast with the proposed combination, Applicants' claimed navigation engine directs the rate at which the imaging array captures sub-images of the fingerprint in response to the rate of movement of the fingerprint.

Accordingly, the proposed combination of *Borza* and *Bohn* does not disclose, teach or suggest at least Applicants' claimed navigation engine.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' amended independent claim 1. Accordingly, Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Further, Applicants respectfully submit that dependent claims 3-7, 9-15, 17 and 18, which depend from allowable independent claim 1 are allowable for at least the reason that they depend directly or indirectly from an allowable independent claim. *In re Fine, supra*. Accordingly, Applicants respectfully request that the rejection of claims 3-7, 9-15, 17 and 18 under 35 U.S.C. § 103(a) also be withdrawn.

### **III. Claim Rejections Under 35 USC § 103 – Claims 8 and 16**

#### **A. Statement of the Rejections**

Claims 8 and 16 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over of *Borza* and *Bohn* as applied to claim 7 further in view of U.S. Patent No. 6,360,004 to Akizuki *et al.*, hereafter *Akizuki*.

#### **B. Discussion of the Rejections**

Applicants' independent claim 1, as amended, comprises a combination (of elements and features) that is not disclosed, taught, or suggested by the prior art.

#### **Claims 8 and 16**

Applicants' independent claim 1, as amended, includes:

“a navigation engine, coupled to the navigation array, the navigation engine configured for controlling when the imaging array captures sub-images, and further configured for receiving the navigation images and based thereon for determining a delta x, which is then compared to a predetermined x unit value for determining the amount of movement of a fingerprint generally along the x-axis and

for determining a delta y, which is then compared to a predetermined y unit value for determining the amount of movement of a fingerprint along a y-axis that is generally perpendicular to the x-axis, wherein the navigation engine directs the rate at which the imaging array captures sub-images of the fingerprint in response to the rate of movement of the fingerprint.”

The proposed combination (namely, *Borza* in view of *Bohn* as applied to claim 7 further in view of *Akizuki*) fails to disclose, teach or suggest at least this feature of claim 1.

*Akizuki* fails to remedy the failure of the combination of *Borza* and *Bohn* to disclose, teach or suggest a navigation engine that receives navigation images and that directs the rate at which an imaging array captures sub-images of a fingerprint in response to the rate of movement of the fingerprint. Thus, the proposed combination fails to disclose, teach or suggest at least this feature of claims 8 and 16, which depend directly or indirectly from claim 1.

Accordingly, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants’ dependent claims 8 and 16. Consequently, Applicants respectfully request that the rejection of claims 8 and 16 under 35 U.S.C. § 103(a) be withdrawn.

**CONCLUSION**

For at least the reasons set forth above, Applicants respectfully submit that pending claims 1, 3-18 and 22-24 are allowable over the cited art of record and the present application is in condition for allowance. Accordingly, a Notice of Allowance is respectfully solicited. Should the Examiner have any comments regarding the Applicants' response, Applicants request that the Examiner telephone Applicants' undersigned attorney.

Respectfully submitted,

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